

Amendments to the Specification:

Before page 1, line 4, please insert the following heading and paragraph.

-- Cross-Reference to Related Application

This application is a divisional of Application No. 10/004,876, filed December 7, 2001.--

Please amend the paragraph starting at page 5, line 18 and ending at page 5, line 23 to read, as follows.

--Figures 4(a) and 4(b) are ~~Figure 4 is a~~ perspective views ~~[[view]]~~ of a toner supply container according to a first Embodiment 1 of the present invention as seen from the side provided with a supply opening shown in Figure 4(a) [[(a)]] and a perspective view of the same as seen from the side provided with a grip as shown in Figure 4(b) [[(b)]].--

Please amend the paragraphs starting at page 5, line 27 and ending at page 6, line 20 to read, as follows.

--Figures 6(a) and 6(b) are ~~Figure 6 is a~~ perspective views ~~[[view]]~~ of a toner supply container according to a first Embodiment 1 of the present invention as seen from the side provided with a supply opening as shown in Figure 6(a) [[(a)]] and a perspective view of the same as seen from the side provided with a grip as shown in Figure 6(b) [[(b)]].

Figure 7(a) ~~Figure 7 is a~~ front view of a toner supply container according to Embodiment 1 of the present invention ~~[[a)]]~~, Figure 7(b) is a sectional view of the same ~~[[b)]]~~, Figure 7(c) is a left side view ~~[[c)]]~~, Figure 7(d) is a right side view ~~[[d)]]~~, Figure 7(e) is a sectional side view ~~[[e)]]~~, and Figure 7(d) is a top plan view ~~[[f)]]~~.

Figure 8(a) ~~Figure 8~~ is a front view $[(a)]$ of a sealing member, Figure 8(b) is of the same as seen in a direction as shown in Figure 7(a) ~~An in (a)~~, Figure 8(c) is a front sectional view $[(d)]$ of the same.

Figure 9(a) ~~Figure 9~~ is a front view $[(a)]$ of a stirring rotation member according to Embodiment 1 of the present invention, Figure 9(b) is a top plan view $[(b)]$ of the same, Figure 9(c) is a side view $[(c)]$ of the same, Figure 9(d) is a top plan view $[(d)]$ of a horizontal portion of the same, Figure 9(e) is a side view $[(e)]$ of a supporting arm of the same.--

Please amend the paragraph starting at page 6, line 25 and ending at page 7, line 3 to read, as follows.

--Figure 11(a) ~~Figure 11~~ is a front view $[(a)]$ of a stirring rotation member according to Embodiment 2 of the present invention, Figure 11(b) is a top plan view $[(b)]$ of the same, Figure 11(c) is a side view $[(c)]$ of the same, Figure 11(d) a top plan view $[(d)]$ of a horizontal portion of the same, and Figure 11(e) and a side view $[(e)]$ of a supporting arm of the same.--

Please amend the paragraph starting at page 7, line 8 and ending at page 7, line 12 to read, as follows.

--Figure 13(a) $[(13)]$ is a front view $[(a)]$ of a stirring rotation member according to Embodiment 3 of the present invention, Figure 13(b) a top plan view $[(b)]$ of the same, Figure 13(c) is a side view $[(c)]$ of the same, $[(same)]$ and Figure 13(d) is a top plan view $[(d)]$ of a horizontal portion of the same.--

Please amend the paragraph starting at page 7, line 17 and ending at page 7, line 20 to read, as follows.

--Figure 15(a) [[15]] is a front view [[a]] of a stirring rotation member in which $L1=L3=$ is approx. 10 mm, Figure 15(b) is a top plan view [[b]] of the same, Figure 15(c) is a side view [[c]] of the same, and a side view Figure 11(d) is [[e]] of a supporting arm.--

Please amend the paragraph starting at page 16, line 17 and ending at page 16, line 25 to read, as follows.

--The engaging portion (positioning portion) 301c [[has a]] preferably has a circular column shape, but is may be of a prism shape, a semicircular shape, or the like. On the side surface 301A1 and the other side surface 301B are each provided with two bosses 301k, 301L [[301]] and boss 301k, 301L [[301]] for positioning the main body 301A of the container when the dimensional inspection is carried out for the main body 301A of the container before factory shipment.--

Please amend the paragraphs starting at page 18, line 11 and ending at page 19, line 9 to read, as follows.

--The feeding member 302 is provided with an extended portion 302c [[302C]] inside the cylindrical portion of the toner supply opening 301a. In this embodiment, the extended portion 302c [[302C]] is protected out of the toner supply opening 301a, and a free end portion of the outward extended portion of the extended portion 302c [[302C]] functions to receive a rotational driving force from the main assembly 100 of the apparatus.

For this reason, a sealing member 303 which is movable in the axial direction is mounted at the free end portion of the feeding member 302.

An end portion (driving force receiving portion) of the extended portion 302c ~~[[302C]]~~ of the feeding member 302 has such a configuration (a polygonal ~~(polygonal~~ shape, more particularly a rectangular configuration) suitable for receiving the rotational driving force from the main assembly 100 of apparatus through a sealing member 303.

One end portion of the shaft portion 302A is supported to the sealing member 303 through one end portion 302a of the extended portion 302c ~~[[302C]]~~. The other end portion 302b of the shaft portion 302A is rotatably supported by a first bearing member 308, so that when the main body 301A of the container is unsealed or opened, the shaft portion 302A is rotatably supported by the first bearing member 308.--

Please amend the paragraph starting at page 25, line 3 and ending at page 25, line 7 to read, as follows.

--Thus, the sealing member 303 is capable of transmitting the driving force from the main assembly 100 of the apparatus through the extended portion 302c ~~[[302C]]~~ to the shaft portion 302A to rotate the feeding member 302.--

Please amend the paragraph starting at page 34, line 17 and ending at page 34, line 24 to read, as follows.

--Figure 15 shows a stirring rotation member 305 having lengths $L1=L2=$ approx. 10 mm and $L3=$ ~~[[L 3=]]~~ 15 mm. Figure 15 is a front view of the stirring rotation member 305 (a), a top plan view thereof (b), a side view thereof (c), a top plan view of a horizontal

portion 305c2, a side view of supporting arms 305b2, 305b5 disposed at the central portion of the bridging portion 305c.--

Please amend the paragraph starting at page 35, line 9 and ending at page 35, line 24 to read, as follows.

--As shown in Figure 16, (a), when $L1 = L3 = 10\text{mm}$ and $L2 = 15\text{mm}$, the situation is like this. Even when the stirring rotation of the stirring rotation member 305 begins, an agglomeration of the toner accumulated behind the flexible member 313 is kept accumulated, and therefore, the flexible member 313 is either unable to or hardly does flex. On the other hand, in the case of Figure 18 (b), in which $L1 = [[L\ 1=]]\ 6\text{mm}$, $L3 = [[L\ 3=]]\ 10\text{mm}$ and $L2 = [[L\ 2=]]\ 15\text{mm}$, when the stirring rotation of the stirring rotation member 305 begins, an agglomeration of the toner accumulated behind the flexible member 313 disappears, and therefore, the flexible member 313 is able to flex. As a result, the projected area of the stirring rotation member 305 relatively to the toner decreases, and therefore, the rotational stirring torque can be reduced.--

Please amend the paragraphs starting at page 38, line 5 and ending at page 39, line 19 to read, as follows.

--The supporting arm 325b and the supporting arm 325b are each in the form of a flat plate and are extended substantially perpendicularly from the rotation shaft portion 325a, and in this embodiment, it has a width 325bL5 (Figure 11) of approx. 12mm and a height of approx. 39.4mm from the axis of the shaft portion 325a. Such supporting arms 325b (325b1-325b6) are provided at six positions, respectively. The thickness 325bL4

(Figure 11) of the supporting arm 325b is preferably 1mm - 3mm, and is approx. 2mm. Such supporting arms 325b (325b1-325b6) are provided at six positions, respectively. More particularly, in addition to two supporting arm 325b1, ~~325b3 325b3~~ and 325b4, 325b6 supporting the opposite axial end portions of the horizontal portion 325c2, there are provided supporting arm 325b2, ~~325b5 325b5~~ supporting the horizontal portion 325c2 at substantially central portions with respect to the axial direction. A distance between the center of the rotation shaft portion 325a and the free end of the supporting arm 325b is properly determined in accordance with the size of the main body 301A of the container, but generally it is preferably 70% - 95% of an inner radius of the main body 301A of the container. In this embodiment, the inner diameter of the main body 301A of the container is approx. 44.5mm, and the length is approx. 39.4mm (89%).

The bridging portion 325c and the bridging portion 325c are constituted by two portions and are staggeredly arranged to provide a phase difference of approx. 180° substantially at the central portion with respect to the axial direction. Total lengths of the bridging portion ~~325c 325c~~ measured in the axial direction are approx. 180mm, and the bridging portion ~~325c 325c~~ are spaced apart from the rotation shaft portion 325a by 39.4mm correspondingly to the height of the supporting arms 325b2 and 325b5. The bridging portion 325c includes a horizontal portion 325c2 extending substantially parallel with a moving direction of the stirring rotation member 325 and an inclined surface portion 325c1 provided downstream of the bridging portion 325c.--

Please amend the paragraph starting at page 40, line 11 and ending at page 41, line 12 to read, as follows.

--The horizontal portion 325c2 and the horizontal portion 325c are integral to each other and are provided upstream of the bridging portion 325c with respect to the rotational direction, extending substantially parallel with the moving direction. In this embodiment, the length of the horizontal portion 325c2 (bridging operation 325c), measured in the moving direction (tangential direction of the circumferential movement, upward in Figure 11, (d)) of the horizontal portion 325c2 adjacent the connecting portion between the bridging portion 325c and the supporting arm 325b, at each of the opposite longitudinal end portion of the bridging portion 325c, is L3, and the length measured in the same direction at a position away from said connecting portion is L1. More particularly, L1 is the length between the central line extending left-right direction and the bottom line in Figure 11, (d), as shown in this Figure, and L3 is the length measured in the same direction at the left and right end positions. In this embodiment, L1 is approx. 6mm, L3 is approx. 10mm. The horizontal portion 325c2 is connected with the supporting arm 325b2, 325b5 ~~325b5~~ at the central portion with respect to the axial direction, but the lengths are rather arbitrary, and the lengths in the widthwise direction may be L1 or L2. In this embodiment, the length of the connecting portion substantially at the central portion of the horizontal portion 325c2, measured along the short side, is 10mm which is the same as the length L3.--

Please amend the paragraphs starting at page 43, line 2 and ending at page 44, line 8 to read, as follows.

--Figure 13 is a front view of the stirring rotation member 335 (a), a top plan view thereof (b), a side view thereof (c), and a top plan view of the horizontal portion 335c2

(d) ~~[, a side view of the supporting arms 335b2, 335b5 and supporting arm 335b2, 335b5~~
(e); and Figure 14 is a sectional front view of a toner supply container 301 provided with the stirring rotation member 335.

As shown in Figure 14, the stirring rotation member 335 includes a rotation shaft portion 335a, supporting arms 335b, bridging portions 335c and flexible members 313. The rotation shaft portion 335 a, the supporting arms 335b [[335 b]] and the bridging portion 335c [[335 c]] are produced through injection molding from a plastic resin material having a relatively high rigidity, whereas the flexible member 313 has a relatively low rigidity material (for example, plastic resin material film or sheet, an elastomer sheet or the like). In this embodiment, the flexible member 313 is made of a polyester sheet.

It is preferable that rotation shaft portion 335a [[335 a]], the supporting arms 335b [[335 b]] and the bridging portion 335c [[335 c]] are preferably produced integrally from a relatively high rigidity plastic resin material through an injection molding, but may be produced by connecting a plurality of parts by welding, bonding or the like into an integral member. In the embodiment, the use is made with an ABS resin material which is integrally molded through an injection molding.

A [[The]] description will now be made as to the configurations of the rotation shaft portion 335a [[335 a]], the supporting arm 335b [[335 b]] and the bridging portion 335c [[335 c]] according to one of the features of the present invention.--

Please amend the paragraphs starting at page 45, line 1 and ending at page 46, line 11 to read, as follows.

--The supporting arm 335b and the supporting arm 335b are each in the form of a flat plate and are extended substantially perpendicularly from the rotation shaft portion 335a, and in this embodiment, it has a width 335bL5 (Figure 13) of approx. 12mm and a height of approx. 39.4mm from the axis of the shaft portion 335a. Such supporting arms ~~335a arm 335b~~ (335b1-335b4) are provided at six positions, respectively. The thickness 335bL4 (Figure 9) of the supporting arm 335b is preferably 1mm - 3mm, and is approx. 2mm in this embodiment. More particularly, two supporting arms 335b1, 335b2 and 335b3, 335b4 are provided to support the opposite end (with respect to the rotational axis) ~~portions axis~~portions of the horizontal portion 335c2. A distance between the center of the rotation shaft portion 335a and the free end of the supporting arm 335b is properly determined in accordance with the size of the main body 301A of the container, but generally it is preferably 70% - 95% of an inner radius of the main body 301A of the container. In this embodiment, the inner diameter of the main body 301A of the container is approx. 44.5mm, and the length is approx. 39.4mm (89%).

The bridging portion 335c and the bridging portion 335c are constituted by two portions and are staggeredly arranged to provide a phase difference of approx. 180° substantially at the central portion with respect to the axial direction. Total lengths of the bridging portion 335c ~~335c~~ measured in the axial direction are approx. 180mm, and the bridging portion 335c ~~335c~~ are spaced apart from the rotation shaft portion 335a by 39.4mm correspondingly to the height of the supporting arms 335b1, 335b2 and 335b3, 335b4. The bridging portion 335c includes a horizontal portion 335c2 extending substantially parallel with a moving direction of the stirring rotation member 335 and an inclined surface portion 335c1 provided downstream of the bridging portion 335c.--

Please amend the paragraph starting at page 48, line 2 and ending at page 48, line 13 to read, as follows.

--The results of the toner discharging test has shown that according to the present invention, the rotational stirring torque required for the stirring rotation at the initial stage is reduced by approx. 20% as compared with a toner supply container not using the present invention, that is, as compared with the container in which the length measured in the tangential direction of the motion of the horizontal portion 305c2 is constant (approx. 10mm) in the longitudinal direction thereof, under the common conditions in which $L1=L3=$ approx. 10mm $L2=$ ~~[[2=]]~~ 15mm at the horizontal portion 305c2 of the bridging portion 305c.--